

REMARKS

The Office Action dated March 29, 2007, has been received and carefully noted. The above amendments and the following remarks are being submitted as a full and complete response thereto.

Claims 1-13 have been rejected. Claims 1, 2, 5, 8, and 11 have been amended and claims 3, 6, 9, and 12 have been cancelled. Accordingly, claims 1, 2, 4, 5, 7, 8, 10, 11 and 13 are pending in this application. Support for the amendments may be found in the specification and claims as originally filed. Thus, Applicant submits that no new matter is added. Applicant respectfully requests reconsideration and withdrawal of all rejections.

Rejection Under 35 U.S.C. §112

Claims 1-13 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In the Office Action, the Examiner stated that the phrase "preset level" of claim 1 does not particularly point out and distinctly claim the subject matter which applicant regards as the invention and thus renders the claims indefinite.

Applicant respectfully submits that the phrase "preset level" refers to any temperature and pressure that would be suitable for the desired applications, which claim 1 defines as "to cool or heat air within a space". Applicant should not be required to specify temperatures or pressures that would unduly limit the scope of Applicant's

invention. Accordingly, Applicant respectfully requests withdrawal of the §112 rejection of claims 1-13.

Rejection Under 35 U.S.C. §102

Claim 1 is rejected under 35 U.S.C. §102(b) as being anticipated by Matsuda et al. (U.S. Patent No. 4,230,470). Applicant respectfully traverses this rejection.

Claim 1, as amended, recites:

A refrigeration system of an air conditioning apparatus to cool or heat air within a space by using phase change of refrigerant, the refrigeration system comprising: an expansion unit to execute adiabatic expansion of refrigerant; an indoor unit with a heat exchanger; a compressor to execute adiabatic compression of the refrigerant; an outdoor unit with a heat exchanger; and a bypass line connected between an inlet and an outlet of the compressor to bypass at least a part of the refrigerant discharged from the outlet of the compressor to the inlet of the compressor, when a pressure of the discharged refrigerant is lower than a preset level or the temperature of outside air of the compressor is lower than a preset level, wherein refrigerant condensed in the indoor unit or the outdoor unit is introduced into the expansion unit through **a plurality of auxiliary evaporators which are connected to each other in series or in parallel** with respect to the flow of the refrigerant for heat exchange (emphasis added).

Applicant respectfully submits that Matsuda does not teach each and every feature of claim 1. In particular, Matsuda does not teach “a plurality of auxiliary evaporators which are connected to each other in series or in parallel,” as recited in claim 1. Matsuda relates to an air conditioning system including a compressor, a condenser, a pressure reducing means, and an evaporator (see col. 5, lines 50-52 and Figure 14). However, Matsuda fails to teach a plurality of auxiliary evaporators that are connected to each other

11. (Currently Amended) The refrigeration system of an air conditioning apparatus as set forth in claim 1, wherein ~~refrigerant condensed in the indoor unit or the outdoor unit is introduced into the expansion unit through at least one auxiliary evaporator for heat exchange, in which~~ a part of the refrigerant to be introduced into the expansion unit is expanded in at least one auxiliary expansion unit under the adiabatic condition, and the refrigerant discharged from the at least one auxiliary expansion unit is mixed with the refrigerant evaporated in the outdoor or the indoor and subjected to heat exchange in the expansion unit, and supplied to the compressor.

12. (Cancelled)

13. (Original) The refrigeration system of an air conditioning apparatus as set forth in claim 11, wherein the at least one auxiliary expansion unit is comprised of a plurality of auxiliary expansion units which are connected to each other in series or in parallel with respect to the flow of the refrigerant.

in series or parallel, as recited in claim 1. Accordingly, Applicant respectfully submits that Matsuda does not anticipate claim 1.

For at least the above reasons, Applicant respectfully requests reconsideration and withdrawal of the rejection of claim 1 under 35 U.S.C. §102(b) over Matsuda.

CONCLUSION

Applicant respectfully submits that this application is in condition for allowance and such action is earnestly solicited. If the Examiner believes that anything further is desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicant's undersigned representative at the telephone number listed below to schedule a personal or telephone interview to discuss any remaining issues.

In the event that this paper is not being timely filed, the Applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to Counsel's Deposit Account Number 01-2300, referencing Docket Number 101190-00049.

Respectfully submitted,



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